STATEMENT OF BASIS (AI No. 5449)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0064661 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Baker Petrolite Corporation
Rayne Blending Plant
135 Industrial Drive
Rayne, Louisiana 70578

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Michelle Bickham

DATE PREPARED: March 12, 2010

1. PERMIT STATUS

A. Reason For Permit Action:

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term

B. LPDES permits – LA0064661
LPDES permit effective date: August 1, 2005
LPDES permit expiration date: July 31, 2010

C. Date Application Received: January 29, 2010

2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY - oilfield chemical mixing and storage facility

Baker Petrolite Corporation is an existing oilfield chemical mixing and storage facility. The facility blends and stores raw materials, intermediate, and finished products. Processes which generate wastewater are limited to the discharge of stormwater from contained chemical storage areas and stormwater runoff from non-process areas of the facility.

B. FEE RATE
1. Fee Rating Facility Type: minor
2. Complexity Type: II (BPJ to 0 points)
3. Wastewater Type: III
4. SIC code: 1389, 5169

C. LOCATION - 135 Industrial Drive, Rayne, Acadia Parish
Latitude 30° 13' 46", Longitude 92° 18' 16"

3. OUTFALL INFORMATION

Outfall 001

Discharge Type: stormwater runoff
Treatment: none
Location: at the point of discharge from the northwest corner of the facility
Flow: 12,460 gpd
Discharge Route: local drainage thence to Bayou Blanc

Outfall 002

Discharge Type: stormwater runoff
Treatment: none
Location: at the point of discharge from the southwest corner of the facility
Flow: 5,330 gpd
Discharge Route: local drainage thence to Bayou Blanc

4. RECEIVING WATERS

STREAM - local drainage thence to Bayou Blanc

BASIN AND SEGMENT - Mermentau Basin, Segment 050201

DESIGNATED USES - a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife
d. agriculture

5. TMDL STATUS

Subsegment 050201 is not listed on LDEQ's Final 2006 303(d) list as impaired. However, subsegment 050201 was previously listed as impaired for mercury, phosphorus, organic enrichment/low DO, pathogen indicators, suspended solids/turbidity/siltation, tds, ammonia, and fipronil, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 050201:

A TMDL study for mercury, *Mercury TMDLS For Subsegments Within Mermentau and Vermilion-Teche River Basins* (see Federal Register Notice: Volume 66, Number 66, pages 18087 – 18089, 4/5/2001), completed on April 5, 2001, states that "some point sources, particularly larger discharges into small water bodies may represent significant site specific (local) sources of mercury which could

contribute to mercury bioaccumulation. ... facilities identified as having reasonable potential for exceeding narrative and/or numeric standards for protection of human health will be required to monitor mercury in their discharges". This facility does not have reasonable potential to discharge pollutants associated with the mercury impairment.

A TMDL study for the organic enrichment/low DO impairment, *Bayou Plaquemine Brule Watershed TMDL to Address Dissolved Oxygen and Nutrients,* was finalized on February 2, 2000, and revised on May 8, 2000. This TMDL states that, of the 66 point sources "...only 8 were considered to have the potential to impact Bayou Plaquemine Brule. The balance of the dischargers are located on tributaries and are too small to have an impact on the targeted waterbody due to the small load and the distance upstream." This facility was not one of the eight point sources that have the potential to impact the stream.

A TMDL study for the pathogen indicators impairment, *Bayou Plaquemine Brule TMDL for Fecal Coliform* (see Federal Register Notice: Volume 66, Number 66, pages 18087 – 18089, 4/5/2001), completed on April 5, 2001, states that "there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL." Furthermore, this facility is not expected to discharge pollutants associated with the pathogen indicators impairment.

A TMDL study for TSS, turbidity, and siltation, *Total Maximum Daily Load (TMDL) For TSS, Turbidity, and Siltation for the Mermentau River Basin,* (see Federal Register Notice: Volume 67, Number 85, pages 22080 – 22082, 5/2/2002), was completed on May 2, 2000. The TMDL report states that two primary sources of TSS and sediment are erosional processes in the watershed and resuspension of bottom deposits to the water column. Because point source contribution of inorganic suspended solids were considered negligible, load allocations for nonpoint source contribution of TSS were set equal to total allowable loads. According to the report, "This TMDL only addresses the landform contribution of TSS/sediment and does not address the insignificant point source contributions."

A TMDL study for TDS, *Bayou Plaquemine Brule TMDL for Total Dissolved Solids (TDS),* was completed on April 25, 2003 (see Federal Register Notice: Volume 68, Number 80, pages 20388 – 20389, 4/25/2003). The TMDL revealed that the Louisiana Water Quality Regulations require point source discharges of treated sanitary wastewater to maintain in-stream TDS water quality standards of 260 mg/l on this subsegment. Therefore, "there will be a need to include TDS limits as the permit requirements based upon a wasteload allocation resulting from this TMDL." This facility sends the sanitary wastewater discharges to the POTW. Therefore, the TMDL does not apply to this permit.

A TMDL study for ammonia, *Bayou Plaquemine Brule TMDL for Ammonia, (see* Federal Register Notice: Volume 67, Number 85, pages 22080 – 22082, 5/2/2002), completed on May 2, 2002, established wasteload allocations (WLAs) for eight point source dischargers to this subsegment. This facility is not expected to discharge pollutants associated with the ammonia impairment, and therefore was not included in this study.

A TMDL study for fipronil, *Total Maximum Daily Load For the Pesticide Fipronil in the Mermentau Basin* (see Federal Register Notice: Volume 67, Number 55, pages 13144 – 13145, 3/21/2002), completed on March 21, 2002, states that "There are no known point sources for fipronil in the Mermentau River Basin". Therefore, the WLA will be set to zero.

6. CHANGES FROM PREVIOUS PERMIT

There are no changes from the previous permit.

7. COMPLIANCE HISTORY/COMMENTS

DMR's were reviewed for the last two years. There were no excursions. All DMR's were submitted in accordance with the existing permit.

An inspection was conducted on September 10, 2008, to assess damage from Hurricane Gustave. There were no problems as a result of the Hurricane.

8. EXISTING EFFLUENT LIMITS

Outfalls 001 and 002 –stormwater runoff

Parameter	**LPDES**	
	Monthly Average	**Daily Maximum**
Flow	Report quarterly Est.	Report quarterly Est.
TOC	---	50 mg/L quarterly Grab
Oil and Grease	---	15 mg/L quarterly Grab
pH	6.0-9.0 s.u. quarterly Grab	

9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 050201 of the Mermentau Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated January 5, 2010 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

Rationale for Baker Petrolite Corporation

1. **Outfalls 001 and 002** - stormwater runoff (estimated flow is Outfall 001 – 12, 460 gpd and Outfall 002 – 5,330 gpd)

	Limitation		
	Monthly Avg	Daily Max	
Pollutant	mg/L		Reference
Flow	---	Report	
TOC	---	50	Similar discharges* (BPJ), Multi-sector General Permit
Oil & Grease	---	15	Similar discharges* (BPJ), Multi-sector General Permit
pH, s.u.	6.0 (min)	9.0 (max)	Similar discharges* (BPJ), Multi-sector General Permit

Treatment: none

Monitoring Frequency: Quarterly for all parameters

Limits Justification: Limits and monitoring frequencies are based on current guidance for similar discharges from other industrial facilities and the Multi-sector General Permit. This facility qualifies for coverage under the Multi-sector General Permit; however, the facility has requested the renewal of their individual permit for the facility.

*	Existing permits for similar outfalls
BPJ	Best Professional Judgement
su	Standard Units

NOTE
For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

An SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC codes 1389 and 5169 are considered to have storm water discharges associated with industrial activity.

For first time permit issuance, the SWP3 shall be prepared, implemented, and maintained within six (6) months of the effective date of the final permit. **For renewal permit issuance**, the SWP3 shall be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).